

# HF Happenings



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South African Radio League \* Suid-Afrikaanse Radioliga Member Society of the International Amateur Radio Union since 1925 www.sarl.org.za www.iaru.org www.iaru-r1.org

July 2014

## IARU HF Championships

he objective is to contact as many other amateurs, especially IARU member society HQ stations, around the world as possible using the 160, 80, 40, 20, 15 and 10 metre bands. No contest QSOS on 12, 17, 30 or 60 metres. On any band, a station may be worked once on Phone (in the Phone



segment) and once on CW (in the CW segment).

The contest takes place on the second full week

The contest takes place on the second full weekend of July, beginning 12:00 UTC Saturday and ending 12:00 UTC Sunday - 12 and 13 July 2014. Both Single and Multi operator stations may operate the entire 24-hour period.

The contest exchange - IARU member society HQ stations send signal report and official IARU member society abbreviation, e.g. Z59HQ will send 59 SARL or 599 SARL. Members of the IARU Administrative Council and the three IARU regional Executive committees send "AC," "R1,""R2," and "R3" as appropriate, e.g. Z54BS would send 59 R1. All others send signal report and ITU zone. For South Africa the ITU Zone is 57. A complete exchange must be logged for each valid Q50.

#### Winter QRP Contest

he QRP contests are intended to be fun activities to promote QRP operation between radio amateurs. Using homebuilt equipment or operating as a portable / field station and using temporary antennas is encouraged, but is not a requirement. The Winter QRP Contest will be run from 12:00 UTC to 15:00 UTC on Saturday 19



July. It is a phone and CW contest using 5 watts (PEP) output or less and a station may be worked once per band per mode. There are no antenna restrictions.

The first hour is limited to the 40 m band only, the remaining two hours the contesters are free to use any HF (non-WARC) band as they see fit. Please comply with the contest preferred segments as detailed in the general rules. It would be advantageous to use the standard QRP calling frequencies as the starting point.

The exchange is a RS or RST report and your grid locator. Please consider exchanging realistic RS(T) signal reports. Please use the full 6 character grid locator. e.g. KG10xu. If the station's grid locator is unknown, then use some other means that identifies the station's location: E.g. the name of the closest town or city e.g. Middelburg (Eastern Cape), or 25 km NW of Bloemfontein. With DX contacts the locator information can be omitted, the RS(T) will suffice as the minimum required exchange as per the general rules

QSO Points - each contact counts 1 point. Prefix / Country multiplier - each South African call area 0 through 9 counts as a multiplier and each DXCC country

worked counts as a multiplier. Station type multiplier -  $\times$  1 for home stations;  $\times$  2 for portable stations and  $\times$  3 for ultra light portable

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"Mobile phone switched on and handheld transceiver switched on as well." DO7KAY

#### July

2 to 5 - Innibos Festival, Nelspruit 4 to 13 - Oyster Festival, Knysna 5 - Durban July 9 to 12 - Bushveld festival, Ellisras 11 - 80th birthday of my Mom 11 and 12 - Crane Festival, Chrissiesmeer 12 and 13 - IARU HF Championships; WRTC 2014 12 and 13 - Bastille Festival, Franschhoek 18 and 19 - Biltong Festival, Somerset West 18 to 20 - Boat and Lifestyle Show, Durban 19 - Winter QRP Contest 21 - Schools open 25 to 27 - Gauteng Motor Show, Brakpan 26 and 27 - RSGB IOTA Contest 28 - Eid-ul-Fitr

#### August

3 - CQ South Africa HF Phone Contest 9 - National Women's day; SARL YL Sprint 16 and 17 - International Lighthouse and Lightship Weekend 17 - CQ South Africa Digital Contest 23 - Radio technology in Action in Johannesburg 31 - CQ South Africa CW Contest



Current Summits-on-the-Air (SOTA) activities are announced at <a href="www.sotawatch.org">www.sotawatch.org</a>
And more SOTA information can be found at <a href="www.sota.org.uk">www.sota.org.uk</a> and <a href="www.zs4bfn.co.za/sota.asp">www.zs4bfn.co.za/sota.asp</a>



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field station. The definitions listed in the general section of the SARL rules define the above stations types accurately.

A mobile station will be treated as a field station. A portable station not meeting the requirements as a field station will be treated as a home station. An ultra light portable field station must comply with all the field station criteria, but the operator must carry the entire station, antenna included to the operating site. The distance carried must not be less than 1 km.

Score = (QSO points) X (Prefix multiplier) X (Station multiplier). E-mailed logs submitted in electronic form will be appreciated. In order of preference, the following formats are requested - Using the provided Excel worksheet (available on SARL forum or direct from the contest manager); Send the logs in a text readable format i.e. Excel worksheet, ADIF or Cabrillo format. In all cases please fill out the normal minimum data fields: date, time, call sign of station worked, mode, RS(T) sent, exchange sent, RS(T) received, exchange received and optionally a comment field.

If the logging program does not have a field for "contest exchange" or the alternative contest exchange is too long and does not fit in the provided entry field, then log that exchange info in the comment field.

Logs shall be submitted by 26 July 2014 to <a href="mailto:contest@sarl.org.za">contest@sarl.org.za</a>. A photo(s) of the station (JPG format) MUST accompany every log entry.

# CQ Southern Africa HF Contests

he aim of the HF Contests is for participants to contact as many amateurs in Southern Africa (refer to General Rules 1.b.) as possible on the 20, 40 and 80 m amateur bands.

HF Phone: the first Sunday in August - 3 August 2014; HF Digital: the third Sunday in August - 17 August 2014, and HF CW: the last Sunday in August - 31 August 2014

The contests run from 13:00 to 16:30 UTC (15:00 to 18:30 CAT) on each Sunday. The following frequencies may be used.

HF Phone - 14 125 to 14 300 kHz; 7 063 to 7 100 and 7 130 to 7 200 kHz and 3 603 to 3 650 and 3 700 to 3 800 kHz

HF Digital - 14 070 to 14 099 kHz; 7 040 to 7 060 kHz and 3 580 to 3 600 kHz

HF CW - 14 000 to 14 060 kHz; 7 000 to 7 040 kHz and 3 510 to 3 560 kHz

The following categories of participation are available - a) Single Operator Single Band; b) Single Operator All Band; c) Multi Operator Single Band or d) Multi Operator All Band. Individual competitors and club stations are encouraged to compete.

The exchange is a RS or RST report and a consecutive serial number starting at 001.

SSB contacts count 1 point. CW and Digital contacts count 2 points. Count two points for each area (see below) on each band. Count 2 points for each stations contacted on all three bands. The call areas are - Area 1: ZS1 Western Cape; Area 2: ZS2 Eastern Cape; Area 3: ZS3 Northern Cape; Area 4: ZS4 Free State; Area 5: ZS5 KwaZulu-Natal; Area 6: ZS6 Gauteng, Mpumalanga; Limpopo and North West; Area 7: 3B8 Mauritius, 3DA Swaziland, 7P Lesotho, 7Q Malawi, C9 Mozambique, Z2 Zimbabwe, 5R Madagascar, FR Reunion Island and FH Mayotte, and Area 8: 9J Zambia, A2 Botswana, D2 Angola, V5 Namibia, ZD9 Gough and Tristan da Cunha Islands, ZS7 Antarctica and ZS8 Marion Island. Contacts with stations outside these areas are allowed, QSO points may be claimed but no zone or three-bander points may be claimed.

Awards. Certificates are awarded to the first three places and the highest single band score in each contest. There is also a trophy for the highest combined score in both contests. A trophy is awarded to the CW contestant in his or her first year of CW achieving the

licence on the summary sheet.

Logs must be submitted to the Bloemfontein Amateur Radio Club by 10 August 2014 (Phone), 24 August 2014 (Digital) and 7 September 2014 (CW). Logs must be sent to <a href="mailto:zs4bfn@netactive.co.za">zs4bfn@netactive.co.za</a> or <a href="mailto:zs4bfn@netactive.co.za">zs4bfn@gmail.com</a>

highest score. Candidates for this trophy shall state the date of the issue of the

Download HF
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<a href="http://www.zs4bfn.co.za/HF-Happenings.asp">http://www.zs4bfn.co.za/HF-Happenings.asp</a>

# European Radio Team Championship 2014 (ERTC 2014)

ress Release 24 June - Special Event Station
OF3ERTC Active Starting This Weekend YOTA (Youngsters on the Air) is a youth
movement inviting fifteen European national
youth teams to a selected rotating EU location every
year to get together, learn from each other and experience various aspects of Amateur Radio through
meaningful and entertaining concepts emphasizing
social, radio communication and technology skills.
OF3ERTC is a special event Amateur Radio station



active in conjunction with ERTC 2014 from 18 to 20 July, while OH2YOTA will be active from the actual event site in Virrat, Finland starting 16 July.

ERTC is a voice communication (VoIP) contest where two-member national youth teams try to make a maximum number of contacts with a maximum number of countries within a defined time period. ERTC uses a Virtual Amateur Radio platform (HamSphere) where amateur radio-like operating is conducted on the Internet with amateur radio-like bands and operating features such as current radio propagation together with beam antennas and amplifiers plus an online logbook, awards and QSLing backed up with learning material and an exam free entry gate. All this makes HamSphere a highly suitable application to learn about real Amateur Radio and help youth to discover Amateur Radio in their regular hangout, the Internet.

See http://www.hamsphere.com/23\_31496\_read.html

Participating Countries - Belgium (ON), Bulgaria (LZ), Croatia (9A), Czech Republic (OK), Estonia (ES), Finland (OH), Italy (I), Lithuania (LY), Netherlands (PA), Poland (SP), Romania (YO), Slovakia (OM), Sweden (SM), United Kingdom (G) and Spain (EA). These country-teams are currently active in Virtual World Amateur Radio practicing and preparing for their trip to Finland. Also, some invited Exhibition Teams will participate in the event over the Internet. This weekend's OF3ERTC combo activity is courtesy of OH1RX, OH2BCI, OH2BH, OH2MM, OH2PM, OH2UA and OH6KZP on Real Amateur Radio while OH9MM will activate OF3ERTC on HamSphere. QSL OF3ERTC via OH2BH.

Press Release 3 July.

European Team Championship (ERTC) 2014 - OF3ERTC

Many were probably wondering what last weekend's Special Event station OF3ERTC was all about. This weekend OF3ERTC will again hit the airwaves through the efforts of Pertti, OH2PM and Rami, OHJ2BCI on frequencies detailed in the OF3ERTC QRZ.com listing at <a href="https://www.qrz.com/db/of3ertc">www.qrz.com/db/of3ertc</a>. Also, OF3ERTC will take part in the IARU HF World Championship with Raimo, OH2BCI, former SRAL President, at the helm. This will be an addition to the OH2HQ group. Similarly, it is very likely that an OHOW multiplier will be activated during the IARU weekend.

ERTC is a Virtual World version of WRTC - to be held one week after the Boston event. Almost one-hundred youngsters will travel to Virrat, Finland, to compete under WRTC-like rules with their QSOs to all corners of the world to be made with real people on Virtual Amateur Radio bands!

The event is financed by the European Union and the International Amateur Radio Union, Region 1.

Many real stations are also scheduled to enter this ground breaking event, among them Tim Duffy, K3LR who will bring his "real virtual" team to participate in ERTC 2014 as an "Exhibition Team". Make sure you can see the distinction between "real" and "virtual" and their variants "virtual-real" and "real-virtual".

You can keep up with the event as it evolves on QRZ.com. More details will be released soon about this unique virtual concept, involving thousands of soon-to-be amateurs all over the world. The current population on used virtual platform is passed 30 000.

CQ Southern Africa HF Contests 3 Aug - Phone; 17 Aug -Digital and 31 Aug - CW

# **HF** Happenings

## African DX

C9, Mozambique. Daniel, ZS6JR, will once again be active as C91JR from the coastal resort of Bilene until 12 July. Activity will be holiday style and operat-



ing mostly RTTY or PSK with 100 watts into a vertical antenna. QSL via GI4FUM. Look for more details and updates on <a href="http://www.3da0ss.net">http://www.3da0ss.net</a>

Namibia. A German team is on the way to Omaruru, Namibia, to support V55HQ, the Namibian Amateur Radio League (NARL) in the IARU HF World Championship (12 - 13 July). Martin, V51W, is the host and team leader, other team members are Gunter, V51WH, Gerd, V51GB, Werner, V51JP, Andrew, V51YJ, and Klaus, V51L. From 5 July and until 15 July 2014 the following guest-operator will be active under their own V5 calls onn all bands and modes - CW: Gerd, V5/DJ5IW, Norbert, V5/DJ7JC and Heye, V5/DJ9RR. SSB: Mathia,s V5/DJ2HD, Simon, V5/DJ2LS, Alfons, V5/DJ8VC, and Uwe, V5/DL9NDS. QSL via their home call signs. QSL V55HQ via DL9NDS, direct or Bureau - online log search and OQRS will also be available on Club Log.

Liberia. Look for Mahmoud, EL2CE, Dickson, EL2DT, and Richmond, EL2BG, to be active as EL2BEN from Monrovia, Liberia, during the IARU HF Championship Contest (12 - 13 July). The call sign is in honour of the LRAA's past president, Ben, EL2BA. QSL direct to: EL2BG (I. Richmond W.K. Harding, 6141 Clifton Ave. Ext., Jacksonville, FL 32211, USA).

### African Islands

3B8, Mauritius. Olof, GOCKV, will be active from here during the CQ WW DX SSB Contest (25 and 26 October) as a Single-Op entry. He will also return with some friends and be active during the CQ WW DX CW Contest (29 and 30 November) as a Multi-? entry. Look for more details to be forthcoming.



Kenya, AF-040. Markus, DJ4EL, will be active as 5Z4/DJ4EL from Lamu Island, Kenya, WW Loc LI07kr, between 4 and 19 October. Activity will be on 40 - 10 metres using SSB. QSL via his home call sign, direct or by the Bureau. QSL also via the LoTW.

Maderia, AF-014. Steve, GOSGB, plans to be active as CT9/GOSGB/p from the island of Madeira (AF-014, DIP MA-001, PIP MD-001, WLOTA 0053) from 11 to 21 July 2014. Steve will concentrate on activating the various lighthouses on the island. He will be active on 40 and 20 metres ONLY. QSL via home call, Direct ONLY QTHR (see QRZ.com).

New IOTAs Announced. Several sources are reporting that 11 new IOTAs have been announced to coincide with the 50th anniversary IOTA convention. They are:

- 1) AF-118P Los Farallones and Jaegerschmidt, Morocco (CN)
- 2) NA-247P St. Maarten's Coastal Islands (PJ7)
- 3) AF-119P Coetivy Island, Seychelles (S7)
- 4) EU-190P Viktoriya Island, Franz Josef Land (RI1)
- 5) OC-296P Tobi and Helen, Palau (T8)
- 6) AS-200P Shikoku Coastal Islands, Japan (JA5)
- 7) AS-201P Sea of Marmara Island, Turkey (TA)
- 8) AS-202P Hawar Island, Bahrain (A9)
- 9) AS-203P Sea of Okhotsk Coast Group, Asiatic Russia (UAOX)
- 10) EU-191P Fericirii Island, Romania [split with Ukraine] (YO)
- 11) NA-248P Nunavut (Devon) Island, Canada (VYO)

I wonder if AF-064 will be activated for the RSGB Islands-on-the-Air Contest on 26 and 27 July 2014?

Wen-Do-Lin Traveller's Rest at Glen, just off the N1 <a href="http://www.wen-do-lin.com">http://www.wen-do-lin.com</a> E-mail: <a href="mailto:mcwilson@telkomsa.net">mcwilson@telkomsa.net</a>

## Contest Calendar

This week's contests compiled by Bruce Horn, WA7BNM. The period covered is 7 to 14 July 2014

RSGB 80 m Club Championship, CW

19:00 - 20:30 UTC 7 July

Mode: CW Bands: 80 m Only Classes: (none)

Exchange: RST and serial no QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: (see rules)

Submit logs by: 23:59 UTC 14 July 2014

Upload log at:

http://www.rsqbcc.org/cgi-bin/hfenter.pl

Mail logs to: (none)

Find rules at: http://www.rsqbcc.org/hf/rules/2014/

r80mcc.shtml

ARS Spartan Sprint 01:00 - 03:00 UTC 8 July

Mode: CW

Bands: 80, 40, 20, 15, 10 m Classes: Skinny; Tubby Max power: 5 watts

Exchange: RST and state, province or country and

Power

Work stations: Once per band Submit logs by: 10 July 2014

E-mail logs to: spartansprint@yahoo.com

Mail logs to: (none)

Find rules at: http://www.arsqrp.blogspot.com/

CWops Mini-CWT Test

13:00 - 14:00 UTC, 19:00 - 20:00 UTC 9 July and

03:00 - 04:00 UTC 10 July

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m Classes: Single Op - QRP, low or high

Max power: HP: >100 watts; LP: 100 watts; QRP: 5

watts

Exchange: Member: Name and member no; non-

Member: Name and state, province or country

Work stations: Once per band QSO Points: 1 point per QSO Multipliers: Each call once

Score Calculation: Total score = total QSO points x

total mults

Submit logs by: 04:00 UTC 12 July 2014

Winter QRP Contest
19 July 12:00 to 15:00 UTC
1st hour - 40 metres only
Phone and CW

Post log summary at:

http://www.hornucopia.com/3830score/

Mail logs to: (none)

Find rules at: <a href="http://www.cwops.org/cwt.html">http://www.cwops.org/cwt.html</a>

QRP Fox Hunt

01:00 - 02:30 UTC 10 July

Mode: CW

Bands: 20 m Only

Classes: Single Op (Fox/Hound)

Max power: 5 watts

Exchange: RST, state, province or country, name and

power output

QSO Points: 1 point per QSO

Multipliers: (none)

Score Calculation: Total score = total QSO points

Submit logs by: 02:30 UTC 11 July 2014

E-mail logs to: (see rules) Mail logs to: (none) Find rules at:

http://www.grpfoxhunt.org/summer\_rules.htm

NCCC RTTY Sprint

01:45 - 02:15 UTC 11 July

Mode: RTTY
Bands: (see rules)
Classes: (none)
Exchange: (see rules)

Score Calculation: Total score = total QSO points x

total mults

Submit logs by: 13 July 2014

E-mail logs to: (none)

Post log summary at: <a href="http://www.3830scores.com/">http://www.3830scores.com/</a>

Mail logs to: (none)

Find rules at: <a href="http://www.ncccsprint.com/rttyns.html">http://www.ncccsprint.com/rttyns.html</a>

NCCC Sprint

02:30 - 03:00 UTC 11 July

Mode: (see rules)
Bands: (see rules)
Classes: (none)
Exchange: (see rules)

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Score Calculation: Total score = total QSO points x

total mults

Submit logs by: 13 July 2014

E-mail logs to: (none)

Post log summary at: <a href="http://www.3830scores.com/">http://www.3830scores.com/</a>

Mail logs to: (none)

Find rules at: <a href="http://www.ncccsprint.com/rules.html">http://www.ncccsprint.com/rules.html</a>

FISTS Summer Sprint 00:00 - 04:00 UTC 12 July

Mode: CW

Bands: 80, 40, 20, 15, 10 m Classes: QRP; QRO; Club

Max power: QRO: 100 watts; QRP: 5 watts

Exchange: FISTS: RST, state, province or country, first name and FISTS no; non-FISTS: RST, state,

province or country, first name and power

Work stations: Once per band

QSO Points: 5 points per QSO with FIST member; FIST members: 2 points per QSO with non-FIST

member

Multipliers: Each US state and VE province once;

Each DXCC country once

Score Calculation: Total score = total QSO points x

total mults

Submit logs by: 11 August 2014 E-mail logs to: n2ed@fistsna.org

Mail logs to: FISTS Sprint Log, c/o Ed Wlodarski N2ED, 3 Shore Rd., Andover, NJ 07821-2240, USA Find rules at: http://www.fists.org/operating.html

IARU HF World Championship

12:00 UTC 12 July to 12:00 UTC 13 July

Mode: CW, Phone

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op CW - QRP, low or high; Single Op Phone - QRP, low or high; Single Op Mixed - QRP, low or high; Multi-Single; IARU Member Society HQ Max power: HP: >150 watts; LP: 150 watts; QRP: 5

watts

Exchange: IARU HQ: RS(T) and IARU Society; Non-

HQ: RS(T) and ITU Zone no

Work stations: Once per band per mode

## **HF** Happenings

QSO Points: 1 point per QSO with same zone or with HQ stations; 3 points per QSO with different zone on same continent; 5 points per QSO with different zone on different continent

Multipliers: Each ITU zone once per band; Each IARU

HQ and each IARU official once per band

Score Calculation: Total score = total QSO points x

total mults

Submit logs by: 12:00 UTC 12 August 2014

E-mail logs to: IARUHF@iaru.org

Mail logs to: IARU HF Championship, IARU International Secretariat, Box 310905, Newington, CT 06111,

USA

Find rules at:

http://www.arrl.org/iaru-hf-championship

SKCC Weekend Sprintathon

12:00 UTC 12 July to 24:00 UTC 13 July

Mode: CW

Bands: 160, 80, 40, 20, 15, 10, 6 m

Classes: (none)

Max operating hours: 24

Exchange: RST, name, state, province or country and

SKCC no or "NONE"

Work stations: Once per band QSO Points: 1 point per QSO Bonus Points: (see rules)

Multipliers: Each state, province, or country once Score Calculation: Total score = (total QSO points x

total mults) and bonus points Submit logs by: 20 July 2014

Post log summary at:

http://wes.mOtrn.com/submission.php

Mail logs to: (none)

Find rules at: http://www.skccgroup.com/

operating\_activities/weekend\_sprintathon/

CQC Great Colorado Gold Rush 20:00 - 21:59 UTC 13 July

Mode: CW

Bands: 20 m Only

Classes: W: Wire antennas; V: Vertical antenna; B: Beam antenna; P: Portable operation, any antenna

Max power: 5 watts

Exchange: RST, state, province or country, class and

member no or power output

Work stations: Once per 30 minutes (max of 3 times) QSO Points: 3 points per 1st QSO with a station; 2 points per 2nd QSO with a station; 1 point per 3rd

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1F Happenings

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QSO with a station; 100 points for 1st QSO

with WOCQC

Multipliers: Each state, province, country

once; each club member once

Score Calculation: Total score = total QSO points x total state/province/country mults x

member mults

Submit logs by: 12 August 2014 E-mail logs to: vkumagai@q.com

Mail logs to: (none)
Find rules at:

http://www.cqc.org/contests/gold2014.htm

### Contest Results

SARL Digital contest held on 25 May 2014, 17 stations were on the air of which 2 were DX stations. Unfortunately only 3 logs were received!

1st Pravin Kumat, ZS5LT 2nd Ken Gurr, ZS6KN

3rd Janusz Danilowicz, ZS1BHJ

The ZS4Sprint was once again a well supported this year. 13 logs was received and up to 62 stations were worked across Southern Africal First place goes to the Bloemfontein ARC, ZS4BFN, who worked 62 stations to make 114 points. Second place goes to Jan Botha, ZS4JAN, who worked 50 contacts to earn 100 points. Closely followed by Johann van Zijl, ZS4DZ, who made 46 contacts and earned 96 points. Congratulations to all that participated.

#### Next Weeks Contests

CWops Mini-CWT Test, 13:00 - 14:00 UTC, 19:00 - 20:00 UTC 16 July and 03:00 - 04:00 UTC 17 July

RSGB 80 m Club Championship, SSB, 19:00 - 20:30 UTC 16 July

NAQCC Straight Key/Bug Sprint, 00:30 - 02:30 UTC 17 July

QRP Fox Hunt, 01:00 - 02:30 UTC 17 July

Russian Radio Team Championship, 07:00 - 14:59 UTC 19 July

VK/Trans-Tasman Contest, Multi-Mode, 08:00 - 14:00 UTC 19 July

DMC RTTY Contest, 12:00 UTC 19 July to 12:00 UTC 20 July

Feld Hell Sprint, 12:00 - 18:00 UTC 19 July

North American QSO Party, RTTY, 18:00 UTC 19 July to 05:59 UTC 20 July

CQ Worldwide VHF Contest, 18:00 UTC 19 July to 21:00 UTC 20 July

RSGB Low Power Contest, 09:00 - 12:00 UTC and 13:00 - 16:00 UTC 20 July

Run for the Bacon QRP Contest, 01:00 - 03:00 UTC 21 July

## History this Week, week starting 7 July 14

1595 - Johannes Kepler inscribes geometric solid construction of the universe

1854 - George Eastman Waterville NY, who invented the Kodak camera, was born

1856 - Charles E. Barnes patents a crank operated machine gun

1866 - The indelible pencil is patented by Edson P Clark, Northampton, Mass

1914 - Robert Hutchins Goddard patents a liquid-fuel rocket motor

1928 - John Logie Baird demonstrated stereoscopic 3-D television.

1934 - My mother was born in Oudtshoorn

1962 - The first transatlantic TV transmission via satellite (Telstar I)

1978 - The Pioneer-Venus 2 Multi-probe launched to Venus

1981 - The first solar-powered aircraft, Solar Challenger, crosses the English Channel

1988 - My daughter Chantelle was born in Bloemfontein

1999 - KPH San Francisco, transmits the last US commercial Morse message

http://www.radiomarine.org/

Items used with acknowledgement to The ARRL Letter, Amateur Radio Newsline, OPDX
Bulletin, 425 DX Bulletin, DXNL DX Newsletter, ARRL DX News, WIA-News, the RSGB News,
Southgate ARC News, DxCoffee and the Islands, Castles & Portable Operations Bulletin

